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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/059,031	01/30/2002	Toshihiro Takagi	3064IT/50891	7279

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EXAMINER

PARRY, CHRISTOPHER L

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/059,031	<b>Applicant(s)</b> TAKAGI ET AL.	
	<b>Examiner</b> Chris Parry	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 is/are allowed.
- 6) ☒ Claim(s) 2-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/25/02</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: On page 3, lines 21, "fail to display no broadcast" should be --fail to display a broadcast--. On page 6, lines 21, "display an video" should be --display a video--.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDermott (U.S. 6,775,843) in view of Kim et al. "Kim" (U.S. 2001/0052124).

Regarding Claim 2, McDermott discloses, a channel selection device (110, 115 – figure 1; Col. 3, lines 13-17) used in a digital/analog broadcasting receiver (110 – figure 1) comprising, a receiver (110 – figure 1) for receiving an encoded digital/analog broadcasting signal originated from a broadcasting station (Col. 3, lines 13-24, 29-40, and 38-65).

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McDermott discloses, a digital/analog decoder (115 – figure 2) for decoding the digital/analog broadcasting signal received from the receiver and then outputting the signal to a display (Col. 3, lines 41-57).

McDermott discloses, a memory (155 – figure 2) for storing, as a channel map (185 – figure 2), channel information contained in the broadcasting signal decoded by the digital decoder (Col. 4, lines 40-54).

McDermott discloses, a control unit (150 – figure 2) for controlling the sections of the receiver (Col. 4, lines 21-29).

McDermott discloses, an input device (not shown) for inputting a user's instruction for channel selection to the control unit (Col. 3, line 66 – Col. 4, line 6).

McDermott discloses, wherein the device receives a digital broadcast (Col. 3, lines 21-31) and an analog broadcast (Col. 3, lines 3-11) which are originated through different physical channels, the digital broadcasting signal has one or a plurality of sub-channels for originating contents therethrough per one physical channel, and also has a VCT (Virtual Channel Table) containing virtual channel information which provides the sub-channels with a correlation with an analog broadcasting physical channel (Col. 5, lines 1-35).

McDermott discloses the control unit (150 – figure 2) controls the device such that the receiver receives the broadcasting signal of a selected channel upon reception of the channel selection instruction from the input device (Col. 3, line 66 – Col. 4, line 6). Although McDermott does not explicitly state the processor 150 controls the receiver

and other elements shown, it is known in the art for a processor to issue commands to elements within a device in order to control the operation of the element.

McDermott discloses, the digital decoder (115 – figure 2) decodes the received broadcasting signal (Col. 3, lines 58-65), in order to obtain the channel information contained in the decoded broadcasting signal and then store the channel information in the memory (Col. 5, lines 7-35).

McDermott discloses, the control unit (150 – figure 2), upon reception of the channel changing instruction from the input device (610 – figure 6), tries channel selection based on the channel information stored in the memory... (638,642 – figure 6) (Col. 6, lines 21-67).

However, McDermott fails to explicitly disclose when [the control unit] failed in the channel selection of the desired channel, [the control unit] selects such a predetermined sub-channel in the same main channel as the desired channel.

In an analogous art, Kim discloses when [the control unit] (124 – figure 1) failed in the channel selection of the desired channel (414 – figure 4), [the control unit] selects such a predetermined sub-channel in the same main channel as the desired channel (418 – figure 4) (Paragraph 41). Kim discloses the example when a user is viewing channel “32-4”, 4 being the highest sub-channel, and the user issues a channel up command, if there is not a higher sub-channel, meaning no signal, then the lowest sub-channel is selected from the main channel 32, making the new channel “32-1” with 1 being the lowest sub-channel. Therefore, it would have been obvious to one of ordinary

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skill in the art at the time the invention was made to modify McDermott with the teachings of Kim to facilitate the control unit selecting a predetermined sub-channel in the same main channel with selecting of the desired channel fails for the benefit of allowing the user to easily be aware of the number of programs broadcast through a selected major channel and to easily select programs (Kim – Paragraph 6).

As for Claim 3, the combination of McDermott and Kim disclose, in particular Kim teaches the channel selection device (132 – figure 1) used in the digital/analog broadcasting receiver (figure 1) according to claim 2, wherein the control unit (124 – figure 1), when failed to select the desired channel (414 – figure 4), obtains the latest VCT to thereby select such a channel in the VCT that has the smallest sub-channel number in the same main channel as the desired channel (418 – figure 4) (Paragraph 41). Kim discloses microprocessor 124 receives supplementary data that includes channel related information (paragraph 25) and this information is used for channel selection purposes (paragraph 35 and 41).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over McDermott in view of Kim as applied to claim 2 above, and further in view of Schneidewend et al. "Schneidewend" (U.S. 6,249,320).

As for Claim 4, McDermott and Kim discloses, in particular McDermott teaches, the digital/analog broadcasting receiver (110,115 – figure 1) equipped with the channel selection device according to claim 2, for receiving a digital broadcast (105,125 – figure 1) according to the ATSC (Advanced Television Systems Committee) standard...(Col. 1, lines 19-26 and Col. 3, lines 12-24). However, the combination of McDermott and Kim fail to explicitly disclose ...an analog broadcast according to the NTSC (National Television Systems Committee) standard.

In an analogous art, Schneidewend discloses the digital/analog broadcasting receiver (100 – figure 1) equipped with the channel selection device (70 – figure 1) according to claim 2, for receiving an analog broadcast according to the NTSC (National Television Systems Committee) standard (Col. 7, lines 7-28). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of McDermott and Kim with the teachings of Schneidewend in order to facilitate receiving an analog broadcast according to the NTSC (National Television Systems Committee) standard for the benefit of conforming to a well known analog standard in the art.

***Allowable Subject Matter***

5. Claim 1 is allowed.

6. The following is a statement of reasons for the indication of allowable subject matter:

Regarding Claim 1, the Examiner could not find any art to teach or fairly suggest the control unit, within the receiver, upon reception of the channel changing request from the user's input device, shifting the frequency to search for a physical channel when the unit could not find the channel information of the desired channel in the memory in combination with other elements recited in the claim. The closest art of record, Kim et al. (U.S. 2001/0052124) discloses when a user selects a channel using the channel up or down key, when the adjacent minor channel is not present, the adjacent minor channel will be chosen. However, if the adjacent minor channel is not available, Kim et al. discloses the receiver will tune to the adjacent major channel with the lowest sub-channel depending on whether the channel up or down key is pressed (¶¶ 44-46).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kim et al. (U.S. 2005/0163148) – Discloses a digital television that can skip the inactive channel, without displaying it on the screen, upon channel conversion.



Park et al. (U.S. 6,048,645) – Discloses a method for selecting a channel of a multichannel television.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris Parry whose telephone number is (571) 272-8328. The examiner can normally be reached on Monday through Friday, 8:30 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiners Initials: CP  
April 13, 2006

  
**CHRISTOPHER GRANT**  
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